

CLAIMS

What is claimed is:

1. A method of generating an image sequence of an object within a scene, comprising:
 - capturing an image of the object with a plurality of camera systems, wherein the camera systems are positioned around the scene;
 - 2D projective transforming certain of the images such that a point of interest in each of the images is at a same position as a point of interest in a first image from one of the camera systems; and
 - outputting the 2D projective transformed images and the first image in a sequence corresponding to a positioning of the corresponding camera systems around the scene.
2. The method of claim 1, wherein capturing the image of the object with the plurality of camera systems includes capturing an image of the object with the plurality of camera systems such that the size of the object is substantially the same in each image.
3. The method of claim 2, wherein capturing the image of the object with a plurality of camera systems includes capturing the image of the object at the same instant in time with the plurality of camera systems.
4. The method of claim 3, further comprising receiving an input corresponding to the particular point in time.

5. The method of claim 2, further comprising receiving an input corresponding to the point of interest for each of the images.

6. The method of claim 1, wherein capturing the images includes capturing an image with a plurality of pan/tilt camera systems positioned around the scene.

7. A system for generating an image sequence of an object within a scene, comprising:

means for storing a first image of the object from a first camera system;

means for storing an image of the object from a plurality of camera systems, wherein the first camera system and the plurality of camera systems are positioned around the scene; and

a frame-sequencing module for 2D projective transforming the images from the plurality of camera systems such that a point of interest in each of the images from the plurality of camera systems is at a same position as a point of interest in the first image.

8. The system of claim 7, wherein the frame-sequencing module is further for outputting the first image and the images from the plurality of camera systems in sequence corresponding to the positioning of the first camera system and the plurality of camera systems around the scene.

9. The system of claim 8, wherein:

the means for storing the first image includes means for storing an image captured by the first camera system at a particular time; and

the means for storing the image from a plurality of camera systems includes means for storing an image captured by each of the camera systems at the particular time.

10. The system of claim 9, further comprising an interface module in communication with the frame-sequencing module for allowing an operator to specify the particular point in time.

11. The system of claim 8, further comprising an interface module for allowing the operator to specify the point of interest in the first image and in the images of the plurality of camera systems.

12. The system of claim 8, wherein the frame-sequencing module is for outputting the first image and the images from the plurality of camera systems in one of a clockwise sequence and a counterclockwise sequence.

13. The system of claim 8, wherein the means for storing the image from the plurality of camera systems includes means for storing an image from the plurality of camera systems such that the size of the object in each image from plurality of camera systems is substantially the same as the size of the object in the first image.

14. A system for generating an image sequence of an object within a scene, comprising:

means for storing a first image of the object from a first camera system;

means for storing an image of the object from a plurality of camera systems, wherein the first camera system and the plurality of camera systems are positioned around the scene; and means for 2D projective transforming the images from the plurality of camera systems such that a point of interest in each of the images from the plurality of camera systems is at a same position as a point of interest in the first image.

15. The system of claim 14, further comprising means for outputting the first image and the images from the plurality of camera systems in sequence corresponding to the positioning of the first camera system and the plurality of camera systems around the scene.

16. The system of claim 15, wherein:

the means for storing the first image includes means for storing an image captured by the first camera system at a particular time; and
the means for storing the image from a plurality of camera systems includes means for storing an image captured by each of the camera systems at the particular time.

17. The system of claim 16, further comprising means for allowing an operator to specify the particular point in time.

18. The system of claim 15, further comprising means for allowing the operator to specify the point of interest in the first image and in the images of the plurality of camera systems.

19. A system, comprising:

a plurality of pan/tilt camera systems positioned around a scene and controlled such that each camera system is aimed at a target within the scene and such that a size of the target in an image from each camera system is substantially the same at a particular time; and
a video storage unit in communication with each pan/tilt camera system for storing images captured by each camera system; and

a frame-sequencing module in communication with the video storage unit, wherein the frame-sequencing module is for 2D projective transforming images from certain of the camera systems such that a point of interest in an untransformed image from one of the camera systems is at a same position as a point of interest in each of the 2D projective transformed images.

20. The system of claim 19, wherein the frame-sequencing module is further for outputting the 2D projective transformed images and the untransformed image in sequence corresponding to the positioning of the corresponding camera systems around the scene.

21. The system of claim 19, further comprising an interface module for allowing the operator to specify the point of interest in the untransformed image and in the 2D projective transformed images.

22. A computer readable medium having stored thereon instructions which, when executed by a processor, cause the processor to 2D projective transform images from certain of a plurality of camera systems such that a point of interest of the 2D projective transformed images is at a same position as a point of interest of an untransformed image from one of the plurality of

camera systems, wherein the camera systems are positioned around a scene and controlled such that each camera system is aimed at a target within the scene and such that a size of the target in an image from each camera system is substantially the same at the particular time.

23. The computer readable medium of claim 22, having further stored thereon instructions which, when executed by the processor, cause the processor to output the 2D projective transformed images and the untransformed image in sequence according to the positioning of the corresponding camera systems around the scene.

24. A method, comprising:

capturing an image of an object within a scene at with a plurality of camera systems, wherein the camera systems are positioned around the scene;
2D projective transforming certain of the images such that a point of interest in each of the images is at a same position as a point of interest in a first image from one of the camera systems; and
outputting the 2D projective transformed images and the first image in a sequence corresponding to a positioning of the corresponding camera systems around the scene.

25. The method of claim 24, wherein capturing the image of the object with the plurality of camera systems includes capturing an image of the object with the plurality of camera systems such that a size of the object is substantially the same in each image.

26. The method of claim 24, wherein capturing the image includes capturing an image of the object at a particular time with the plurality of camera systems.

27. The method of claim 25, further comprising receiving an input corresponding to the particular point in time.

28. The method of claim 27, further comprising receiving an input corresponding to the point of interest for each of the images.

29. The method of claim 28, wherein capturing the images includes capturing the image with a plurality of pan/tilt camera systems positioned around the scene.